

particular, a mobile communications terminal is to be created which, on the one hand, is suitable for operation in mobile radio networks with multimedia user facilities and ~~which~~, on the other hand, minimizes power consumption for the presentation of corresponding information on a display of the mobile communications terminal.

~~This object is achieved according to the present invention by means of a mobile communications terminal with the features of claim 1. The subclaims describe preferred and advantageous embodiments of the present invention.~~

### SUMMARY OF THE INVENTION

According ~~Thus, according~~ to the ~~present~~ invention, the display of the mobile communications terminal is divided into two display areas. The first display area is provided for the presentation of (multimedia) communications information, and the second display area is provided exclusively for the presentation of miscellaneous user information, which is displayed, in particular, when the terminal is in standby mode. The mobile communications terminal according to the ~~present~~ invention is designed in such a way that, for the duration of the standby mode, or for the duration of an operating mode in which no multimedia communications information is to be presented, only the first display area provided for the presentation of miscellaneous user information is activated, whereas the display area provided for the presentation of communications information remains deactivated.

The surface of the display area provided for the presentation of miscellaneous user information is advantageously small compared with the total display surface or the surface of the display area provided for the presentation of (multimedia) communications information, ~~so that~~ As such, in the absence of communications information which is to be presented, the power consumption can be reduced according to this surface ratio. In particular, in the absence of communications information which is to be presented, only the display area provided for the presentation of miscellaneous user information is regularly refreshed.

The display is advantageously designed in the form of an alphanumeric, active-matrix liquid crystal color display.

With the aid of the present invention, high-resolution color displays (video displays) can be operated in a power-saving or energy-saving manner, since only a partial surface (for example the upper, lower or lateral edge of the display) is made available for the presentation of miscellaneous user information (e.g. status information), which does not correspond to multimedia communications information which is transmitted during a communications link to the mobile communications terminal. If the standby mode is ended and multimedia communications information is available and is to be presented on the terminal display, the entire terminal display is refreshed and, in normal mode, the multimedia communications information is presented on one display area and the miscellaneous user information, e.g. the battery level or the like, is presented on the other display area.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Preferred Embodiments and the Drawings.

### **DESCRIPTION OF THE DRAWINGS**

~~The invention is explained below with reference to preferred embodiments and to the drawing.~~

Fig. 1 shows a simplified block diagram of a mobile communications terminal according to the teachings of the present invention.

Fig. 2a and Fig. 2b show presentations of the status of the display of the mobile communications terminal shown in Fig. 1 in standby mode and normal mode; and

Fig. 3 and Fig. 4 show display conditions in standby mode according to variants of the preferred embodiment explained with reference to Fig. 1 and Fig. 2.

### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

Fig. 1 shows a simplified block diagram of a preferred embodiment of a mobile communications terminal according to the present invention. This terminal comprises

includes an antenna 1, a transmit unit 2 and a receive unit 3, which collectively form the air interface

of the terminal and are used to set up a communications link with a base station of the corresponding mobile radio network. The transmit and receive units 2 and 3 are connected to a frequency converter 5 and a unit 6 for digital signal processing of the communications information which is to be transmitted or received. A unit 7, which acts as the interface between the mobile terminal and a user of the mobile terminal (man-machine interface), is connected to the unit 6. In particular, a keypad 8 and a microphone 9 are connected to the man-machine interface 7 to enter information, and also one connected to a loudspeaker 10 and a display 13 to output information. The display 13 is controlled by a display controller 11. A unit 4 is connected to the internal structure of the mobile terminal to supply power to the entire mobile terminal, ~~and said~~ The unit 4 ~~may~~ also may have a battery voltage regulator to maintain the supply voltage at a constant level. The aforementioned mobile terminal components, as shown in Fig. 1, correspond to the intrinsically customary components of conventional mobile telephones, which, therefore, do not ~~therefore~~ need closer examination at this point.

However, a special feature of the present invention is the design of the display 13, which is provided in particular in the form of a color display; for example, an active-matrix liquid crystal color display. The display 13 is designed in particular in such a way that it serves not only to display multimedia communications information which is received by the receive unit 3, for example, in particular while a communications link exists, but also to present miscellaneous user information, ~~for example~~, which is not communications information in the true sense and which, for example, provides information on specific conditions of the mobile terminal. For this purpose, the display surface of the display 13 is divided into two partial areas, the first partial area being provided exclusively for the visual presentation of the aforementioned (multimedia) communications information, whereas the second partial area is provided in particular for the visual presentation of miscellaneous user and status information. The display controller 11 is designed according to the present invention in such a way that, if no communications